

REMARKS

Reconsideration of the above-identified application in view of the foregoing amendments and following remarks is respectfully requested.

A. Claim Status / Explanation of Amendments

Claims 1, 3-7, and 9-12 are pending and were rejected. As to matters of form, the Office Action objected to the recitation of a second reading mode of “reading signals in one scan” in claims 1 and 7 since the specification allegedly does not provide the requisite support. Applicant respectfully asserts that the process of reading and combining signal charges corresponding to the same color component in one vertical line is understood as being accomplished in a single scan. This is described, for example, in p. 2, lns. 7-21 and Figs. 4A-B. Repetitive vertical scans do not provide any practical benefit to Applicant’s signal processing apparatus and are merely redundant. For the above reasons, Applicant respectfully asserts that the requisite support for the recitation of “in one scan” is inherently present and requests withdrawal of the objection.

As to the merits, claims 1, 3-4, 6-7, and 9-10 were rejected pursuant to 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,765,616 to Nakano, et al. (“Nakano”) in view of U.S. Patent No. 6,661,451 to Kijima, et al. (“Kijima”). [3/18/08 Office Action, p. 3]. Claim 12 was rejected pursuant to 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Kijima and further in view of U.S. Patent No. 7,145,5981 to Maeda (“Maeda”). [3/18/08 Office Action, p. 6]. Claims 5 and 11 were rejected pursuant to 35 U.S.C. § 103(a) as allegedly being unpatentable over Nakano in view of Kijima and further in view of U.S. Patent No. 6,630,965 to Xue, et al. (“Xue”). [3/18/08 Office Action, p. 7].

By this paper, claims 1 and 7 are amended to recite, *inter alia*, a “second reading mode of reading all signals in one scan.” Support for the changes to claims 1 and 7 can be found

throughout the application as originally filed including, for example, Figs. 2A-B and 4A-B along with accompanying descriptive text.

No new matter will be introduced into this application by entry of these amendments. Entry is respectfully requested.

B. Claims 1, 3-4, 6-7, and 9-10 are Patentable over Nakano in view of Kijima

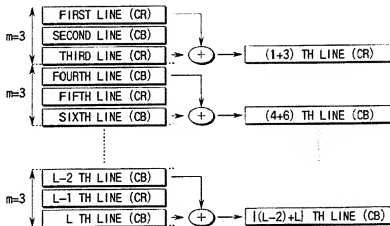
Applicant respectfully traverses the rejection of claims 1, 3-4, 6-7, and 9-10 as allegedly being unpatentable over Nakano in view of Kijima. As set forth in detail below, Nakano and Kijima do not teach, disclose, or suggest a second reading mode of reading all signals in one scan. Accordingly, the Section 103(a) rejection should be withdrawn. ‘

The Office Action contends that since there allegedly is no support for the recitation of “a second reading mode of reading signals in one scan,” the rejection of independent claims 1 and 7 is maintained. The rejection is, however, amended from § 102(b) to § 103(a) with Kijima being introduced to overcome deficiencies in Nakano. [3/18/08 Office Action, p. 2-3]. As detailed in Section A above, Applicant respectfully asserts that the necessary support for the recitation of “reading signals in one scan” is present in the specification. Since reading signals in one scan is necessary for Applicant’s signal processing apparatus to function properly, support for the recitation of the above element is inherently present in the specification. Furthermore, Applicant has amended claims 1 and 7 for additional clarity such that they now recite, *inter alia*, “reading all signals in one scan.”

By the Office Action’s own admission, Nakano does not “explicitly teach that the added signals are read out by one scan in the second mode, the same colors in every other line are added.” In attempting to overcome this deficiency the Office Action refers to Kijima and

contends that Kijima teaches that “the signals of pixels of the same color in every other line are added in one scan” in Figs. 6-7. [3/18/08 Office Action, p. 4-5].

Applicant notes, however, that in Figs. 6-7 the pixel signals are placed in groups of three such that only the first and third line within each group is read out. This is shown, for example, in Fig. 6 (reproduced below) wherein pixel signals from a first and third line are added and output, then pixel signals from a fourth and sixth line are added and output. This process is repeated up through the L-2 and Lth lines. [Kijima, col. 7, lns. 24-35]. Thus, the second, fifth, and L-1th lines are not read out. Since Kijima does not read each signal in each and every line, Kijima fails to teach, disclose, or suggest a “second reading mode of reading all signals in one scan” as recited in Applicant’s amended claims 1 and 7.



[Kijima, Fig. 6].

Accordingly, Nakano and Kijima - whether alone or in combination - fail to teach, disclose, or suggest a signal processing apparatus comprising, *inter alia*, a “second reading method of reading all signals in one scan by adding signals generated by the lines of photoelectric conversion elements by at least two signals corresponding to the photoelectric conversion elements of a same color in every other line” as recited in Applicant’s amended claims 1 and 7. Applicant submits claims 1 and 7 are patentably distinct from Nakano and

Kijima for at least this reason. Since claims 3-4, 6, and 9-10 depend from claim 1 or 7 they are all allowable for the same additional independent reasons set forth with respect to claims 1 and 7. Accordingly, the Section 103 rejection of claims 1, 3-4, 6-7, and 9-10 should be withdrawn.

C. Claims 5 and 11-12 are Patentable over Nakano in view of the Cited References

Applicant respectfully traverses the rejection of claims 5 and 11-12 under 35 U.S.C. § 103(a) as allegedly being unpatentable for obviousness over Nakano in view Kijima and further in view of Maeda or Xue. For at least similar reasons as stated above and for the tertiary references failing to overcome the deficiencies of the primary reference, claims 5 and 11-12 are asserted to be patentably distinct. Accordingly, Applicant respectfully traverses the Section 103 rejection of claims 5 and 11-12 submits that all of the pending claims are now allowable for the above reasons and early, favorable action in that regard is requested.

Applicant has chosen in the interest of expediting prosecution of this patent application to distinguish the cited documents from the pending claims as set forth above. These statements should not be regarded in any way as admissions that the cited documents are, in fact, prior art. Likewise, Applicant has chosen not to swear behind the references cited by the Office Action, or to otherwise submit evidence to traverse the rejection at this time. Applicant, however, reserves the right, as provided by 37 C.F.R. §§ 1.131 and 1.132, to do so in the future as appropriate. Furthermore, Applicant has not specifically addressed the rejections of the dependent claims. Applicant respectfully submits that the independent claims, from which they depend, are in condition for allowance as set forth above. Accordingly, the dependent claims also are in condition for allowance. Applicant, however, reserves the right to address such rejections of the dependent claims in the future as appropriate.

CONCLUSION

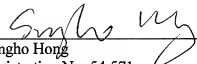
For the above-stated reasons, this application is respectfully asserted to be in condition for allowance. An early and favorable examination on the merits is earnestly solicited. In the event that a telephone conference would facilitate the examination of this application in any way, the Examiner is invited to contact the undersigned at the number provided.

THE COMMISSIONER IS HEREBY AUTHORIZED TO CHARGE ANY ADDITIONAL FEES WHICH MAY BE REQUIRED FOR THE TIMELY CONSIDERATION OF THIS AMENDMENT UNDER 37 C.F.R. §§ 1.16 AND 1.17, OR CREDIT ANY OVERPAYMENT TO DEPOSIT ACCOUNT NO. 13-4500, ORDER NO. 1232-5181.

Respectfully submitted,
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Dated: June 13, 2008

By: _____


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